

# Voice systems in the Austronesian languages of Nusantara: Typology, symmetry and Undergoer orientation

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## 1 Introduction

This paper deals with the typology of the Austronesian (henceforth AN) languages of Nusantara (encompassing Indonesia, East Timor, the non-Indonesian part of Borneo) by looking at their voice systems and voice markings. It will be demonstrated that they consist of a number of language-types, which can be accounted for in terms of different (default) orientations along a continuum of Actor (A) vs. Undergoer (U).<sup>1</sup> By and large, the AN languages of Nusantara are syntactically symmetrical, but morpho-pragmatically more or less U-orientated in a number of aspects.

The paper is organised as follows. A brief overview of grammatical relations and markings in AN languages of Nusantara is given in section 2, followed by the descriptions of language types and their typical properties in section 3. Section 4 provides discussions on voice system variations, whereby notions of Actor vs. Undergoer orientations are clarified and used to account for different kinds of ‘ergative’ properties that splash out throughout the AN languages of Nusantara in their morphology, syntax and discourse. Conclusion is given in section 5.

## 2 Grammatical relations and marking in brief

The AN languages of Nusantara are essentially Verb-Object languages, with Subject possibly coming either before the verb (hence SVO, as in Indonesian, Javanese and Balinese) or after Object (hence VOS, as in Nias and *Tukang Besi*). Syntactic distinctions of CORE vs. Oblique (or non-CORE) arguments are generally evident from their markings. CORE arguments are generally bare noun phrases (NPs) and non-COREs are prepositional phrases (PPs).<sup>2</sup> Example (1) from Indonesian shows the verb ‘throw’, which has two CORE arguments and one non-CORE argument. The CORE and non-CORE groups of arguments are represented within separate angle brackets on the right side of the example with their semantic role information put within brackets.<sup>3</sup>

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<sup>1</sup> Abbreviations used in this paper are as follows. A and U for Actor and Undergoer macroroles respectively. Specific (thematic, or ‘micro’) roles are abbreviated as follows: ag (agent), ben (beneficiary), go (goal), exp (experiencer), inst (instrument), th (theme) and loc (locative). When necessary, the combination of the two are used, e.g. U.th represents a theme Undergoer role and U.loc represents a locative Undergoer. Other abbreviations used in the glosses (in alphabetical order) are: 1s/p (first person singular/plural pronoun), 2s/p (second person singular/plural pronoun), 3s/p (third person singular/plural pronoun), A.PART (active participle), APPL (applicative), AV (agentive/active voice), BV (beneficiary voice), CR (core), DAT (dative), DEF (definite), DIST (distal), ERG (ergative case), GEN (genitive), GER (gerund), F (female), FUT (future), h.r. (high register), LV (locative voice), M (male), NOM (nominative), IRR (irrealis), IV (instrument voice), PER (perfect), PIV (pivot), P.PART (past participle), PRES (present), PV (patient voice), REC (reciprocal), REAL (realis), S (subject of the intransitive verb), UV (undergoer voice).

<sup>2</sup> Properties of CORE may vary from language to language. Arka (1998) lists a number of CORE properties in Balinese such as pronominal copy and quantifier float.

<sup>3</sup> In Lexical-Functional Grammar (LFG), the CORE vs. non-CORE information is part of a syntactic argument structure (*a-str*) whereas the semantic role information is part of semantic structure (*sem-str*), see (Arka 1998; Manning 1996; Bresnan 2001).

## (1) Indonesian

*Perusuh*      *me-lempar batu ke(arah)*      *polisi* ‘throw’      <CORE, CORE><non-CORE>  
rioter          AV-throw stone to(wards) police          (A)    (U.th)    (goal)  
‘The rioter threw stones to the police’

One (CORE) argument is generally picked up as the privileged argument (e.g. with exclusive access to control and relativisation), traditionally known as Subject—referred to as PIV(OT) in this paper. It is generally the default TOP(ic) of the sentence. Other arguments (e.g. Objects and Obliques) are simply referred to as non-PIV.<sup>4</sup> In the Indonesian example shown in (1), the NP coming before the verb, *perusuh* ‘the rioter’, is the PIV. Voice alternations allow different arguments to be associated with PIV. The mechanism that regulates alternative associations of arguments with PIV will be referred to as linking/mapping<sup>5</sup> (e.g. the Active Voice (AV) verb has an Actor–CORE–PIV linking and the PASS verb has the linking of U–CORE–PIV<sup>6</sup>). The PIV argument in many AN languages of Nusantara receives no special marking. However, in *Tukang Besi* (Donohue 2002), PIV gets a phrasal marker (which is then like Tagalog and Formosan languages). This is illustrated in (2), where the PIV argument is marked by *na*<sup>7</sup>, associated the A argument in (2)a or U argument in (2)b.

(2) *Tukang Besi*

a. *no-kiki'i*              *te*    *iko'o na*    *beka*  
3REAL-bite      CR    you    NOM    cat  
‘The cat bit you’

b. *no-kiki'i=ko*              (*na iko'o*)              *te*    *beka*  
3REAL-bite=2s.U      NOMyou              CR    cat  
‘The cat bit you’ (Lit. You, the cat bit’)

Many AN languages of eastern Nusantara, e.g. *Taba* (Bowden 2001) and *Kambera* (Klamer 1998; Klamer 1996), do not show PIVOT<sup>8</sup>. These languages typically have no voice systems but show systematic pronominal agreement on the verbs.

### 3 Language types and their distributions

In terms of voice systems and marking, the AN languages of Nusantara can be classified into four groups: (i) the language group with typical AN voice morphology, (ii) the group with mixed voice morphology, (iii) the isolating group (with analytic voice), and (iv) the group without voice system.

<sup>4</sup> Languages vary with respect to further classifications (and markings) of non-PIV arguments.

<sup>5</sup> I will not be explicit in the exact principles of linking in this paper, see (Alsina 1996; Bresnan and Kanerva 1989; Bresnan 2001; Davis 1996; Manning 1996; Wechsler 1995; Wechsler and Arka 1998) further details and different proposals. It is enough to say that the default mapping generally shows harmonic alignment where the most prominent argument is mapped onto the most prominent argument (e.g. the agent argument is mapped onto Subject because agent is the most prominent argument in the semantic structure and Subject is the most prominent argument in grammatical structure. (This harmonic alignment is apparently not observed in ergative languages.) Linking is informally represented by either putting the linked arguments below/above each other as in (1) and (3)a, or drawing a line that connects them as in (3)b. A particular type of linking is highlighted by putting the linked arguments in a box as in (5).

<sup>6</sup> Note that this is a rough abbreviation because in passivisation the A argument of the transitive verb should also be ‘removed’ from its CORE status.

<sup>7</sup> Note that *na* in Puyuma is also a marker of PIV (see Teng 2001).

<sup>8</sup> This is not exclusively in Eastern Indonesia because Acehnese, a language in Sumatra, also shows no evidence for PIV, see (Durie 1985, 1987).

The first group is the group with voice morphology, which consists of two sub-groups, namely Indonesian type and Tagalog type.<sup>9</sup> The Indonesian-type languages predominate in the western part of Indonesia (Sumatra, Java and the Kalimantan/Indonesian part of Borneo) whereas the Tagalog-like languages are found in North Sulawesi and North Borneo. Well-documented languages in this group include Karo Batak (Woollams 1996) and Nias (Brown 2001) in Sumatra, Javanese (Sudaryanto 1991) and Sundanese (Hardjadibrata 1985; Robins 1983) in Java, as well as Balinese (Arka 1998; Arka and Simpson 1998; Artawa 1994; Beratha 1992; Clynes 1995; Arka to appear.b, to appear.c).

The Indonesian-type languages typically have the following properties. First of all, they show symmetrical voice systems, where AV-UV voice alternations do not result in the demotion of the Core status of arguments into OBL. This is illustrated by Balinese in (3), where in both sentences the A and U argument are cores. The evidence that voice alternations do not affect the CORE status of A/U arguments in (3) comes from a number of diagnostic properties such as binding, pronominal copy and quantifier float (see Arka 1998 for detailed discussions).

## (3) Balinese

- |   |  |
|---|--|
| <p>a. <i>Cang lakar meli kedis-e nto</i><br/>         1s FUT AV-buy bird-DEF that<br/>         ‘I will buy the bird’</p>    | <p>[PIV] [non-PIV]<br/>         ‘AV.buy’ &lt;CORE, CORE&gt;<br/>         (A) (U)</p>   |
| <p>b. <i>Kedis-e nto lakar Ø-beli cang</i><br/>         bird-DEF that FUT UV-buy 1s<br/>         ‘The bird, I will buy’</p> | <p>[PIV] [non-PIV]<br/>         ‘UV.shoot’ &lt;CORE, CORE&gt;<br/>         (A) (U)</p> |

Second, Indonesian-type languages generally have true passive verbs—i.e. derived verbs where the Agent is demoted to an Oblique or suppressed altogether (e.g. *di*-verbs in Indonesian). Third, the affix that marks applicativisation typically differs from the affix that marks voice selection. For example, in Indonesian, *-i* and *-kan* are applicative suffixes, which are different from the voice affixes (*meN-* ‘AV’, *Ø-* ‘UV’, and *di-* ‘PASS’). Non-applicative and applicative verbs can appear in different voices (AV, UV or PASS). Fourth, voice morphology in the Indonesian-type languages signals linking of generalised roles of A or U to PIV. Thus, sentences (4) from Indonesian show that the verbs are all in UV forms (marked by *Ø*-prefix) and the U PIV arguments can be thematically different semantic roles—locative as in (4)a, recipient as in (4)b, goal as in (4)c, and instrument as in (4)d. (This is not the case in Tagalog-like languages, see below).

## (4) The U PIV arguments are thematically different semantic roles (Indonesian)

- |  |                            |
|--|----------------------------|
| <p>a. <i>Kursi itu dia Ø-duduk-i</i><br/>         chair that 3s UV-sit-APPL<br/>         ‘The chair, (s)he sat on it’</p>                                      | <p>(PIV = U.Locative)</p>  |
| <p>b. <i>Orang itu saya Ø-beri uang</i><br/>         person that 1s UV-give money<br/>         ‘The person, I gave him/her money’</p>                          | <p>(PIV = U.Recipient)</p> |
| <p>c. <i>Rumah itu mereka Ø-lempar-i dengan batu</i><br/>         house that 3p UV-throw-APPL with stone<br/>         ‘The house, they threw stones to it’</p> | <p>(PIV = U.Goal)</p>      |

<sup>9</sup> The terms ‘Indonesian-type’ and ‘Phillipine-type’ are also used in (Himmelmann 2002, 2002; Wolff 1996)

- d. *Batu itu mereka Ø-lempar-kan ke rumah itu* (PIV = U.Theme/Instrument)  
 stone that 3p UV-throw-APPL to house that  
 ‘The stones, they threw them to the house’

Tagalog-type languages are similar to Indonesian-Type languages in one crucial aspect but different in at least five others.<sup>10</sup> Like Indonesian, Tagalog has a symmetrical voice system. Thus, in all non-active voices shown in Tagalog sentences in (5)b-e, the Actor argument is not demoted to non-core; it is a Core argument marked by *ng=*.

## (5) Tagalog

- a. *M-um-ili ang=lalake ng=isda sa=tindahan*  
 PERF.AV-buy [PIV]=man [CR]=fish [non-CR]store  
 ‘The man bought fish at the store’
- b. *B-in-ili-Ø ng=lalake ang=isda sa=tindahan*  
 PERF-buy-PV [CR]=man [PIV]=fish [non-CR]=store  
 ‘The man bought the fish at the store’
- c. *B-in-ilih-an ng=lalake ng=isda ang=tindahan*  
 PERF-buy-LV [CR]=man [CR]=fish [PIV]=store  
 ‘The man bought fish at the store’
- d. *Ip-in-am-bili ng=lalake ng=isda ang=pera*  
 IV-PERF-buy [CR]=man [CR]=fish [PIV]=money  
 ‘The man bought fish with the money’
- e. *I-b-in-ili ng=lalake ng=isda ang=bata*  
 BV-PERF-buy [CR]=man [CR]=fish [PIV]=child  
 ‘The man bought fish for the child’

Tagalog differs from Indonesian in at least the following five aspects. (i) It has no true passive constructions (i.e. the constructions with Agent Obliques).<sup>11</sup> (ii) It has a multi-way voice system with verbs showing different voice morphology for specific or ‘micro’ non-actor roles (i.e. the Patient Voice (PV) verb as in (5)b, the Locative Voice Verb as in (5)c, the Instrument Voice verb as in (5)d and the Benefactive Voice (BV) verb as in (5)e. That is, there is no single (generalised) UV verb as observed in Indonesian or Balinese. (iii) It has no separate applicative affixes. The Tagalog LV *-an* (4c) is at the same time an applicative and voice marker. This is therefore comparable to the combination of two affixes in Balinese, Locative applicative suffix *-(n)in* and the UV prefix). (iv) It has different morphology signaling mood distinctions (+/-REALIS, e.g. whether an event has or has not taken place,

<sup>10</sup> See (Himmelmann 2002) for a comparison between Tagalog and two Sulawesi languages (Toratan/Ratahan in north Sulawesi and Lauje in central Sulawesi), which reflects similarities and differences among these languages. Ratahan appears to have a system that is ‘intermediate’ between Tagalog and Lauje.

<sup>11</sup> Kroeger (p.c) confirms this. He says that the *ma*-verbs, which (for some people) are believed to be passives because the Agents are not present, allow either non-specific interpretation or a specific (null pronoun) interpretation. And crucially, according to him when he applied his tests for “core argument” status, the Actor/agent NP always behaved like a core argument, for the *ma/-na*- UV form as well as the regular UV form.

or will take place, see also Table 1 Below.<sup>12</sup> (v) It has phrase markers for dependent/argument marking (e.g. *ang* ‘PIV’ vs. *ng* ‘non-PIV’).

Languages in North Sulawesi, e.g. Toratan or Ratahan, see Himmelmann and Wolff (1999), and languages in North Borneo, e.g. Bonggi, Kadazan, Kimagarang, Timgon and Tombonuo, see Clayre (1996:60), look like Tagalog. In contrast, other languages in (east) central and south Sulawesi, e.g. Balantak (Busenitz 1994) and Makasarese (Manyambeang, Mulya, and Nasruddin 1996) as well as the languages in the Indonesian part of Borneo, e.g. Dayak Kendayan (Thomas et al. 1984), are more like Indonesian. Those languages that look like Tagalog show (i) multi-way voice systems, (ii) UV verbs with specific/micro roles, (iii) no separate applicative affixes, and (iv) +/-REALIS distinctions. Table 1 (adapted from Himmelmann (2002:126-127) shows the similarities between Toratan and Tagalog verbal voice markers.

**Table 1. Toratan vs. Tagalog voice affixes**

	+REALIS		-REALIS	
	Toratan	Tagalog	Toratan	Tagalog
ACTOR	<i>-im-/N-</i>	<i>-um-/N-</i>	<i>-um-/M-</i>	<i>-um-/M-</i>
PATIENT	<i>-in-</i>	<i>-in-</i>	<i>-an</i>	<i>-in</i>
LOCATIVE	<i>-in- -an</i>	<i>-in- -an</i>	<i>-an</i>	<i>-an</i>
THEME	<i>-in-</i>	<i>i- -in</i>	<i>-∅</i>	<i>i-</i>

Languages in central and south Sulawesi, e.g. Lauje (a Tomini-Tolitoli group, Himmelmann 2002), and languages in the Kalimantan part of Borneo, e.g. Lun Bawang (Clayre 1996), Dayak Kedayan (Thomas et al. 1984), are more like Indonesian in that they tend to have UV verbs with generalised roles with applicatives. Some of them may constitute an ‘intermediate’ group between the Indonesian type and Tagalog type because (a) they show mood distinctions and (b) they have a multi-way voice system with applicativisation. Crucially the applicative formation reduces the voice system into an Indonesian-type voice system, as exemplified by Lauje (Himmelmann 2002). Lauje has [+/-REALIS] distinctions within a three-way voice system as shown in Table 2. An example showing a locative voice is given in (6). Note that the system shown by Table 1 says that in the AV/UV verbs (in contrast to the LV verbs), the verb bears no *-ang* nor *-i* locative affixes. Importantly, Lauje has applicative suffix *-ae*, exemplified by (7). Note that the applicative suffix can appear in UV and AV verbs, giving rise to *UV.verb-ae* as in (7)a and *AV.verb-ae* as in (7)b. And, as pointed out by Himmelmann (2002: 135), the applicative suffix in Lauje is in complementary distribution with the Locative voice marker *-ang* and *-i*; that is, there are no formatives of the shape *-ana’e* or *ia’e* ‘LV-APPL’. In other words, in the applicative verbs, the basic three-way voice system is reduced to a two-way voice system.

**Table 2 Lauje voice affixes**

	+REALIS	-REALIS
ACTOR VOICE (AV)	<i>N-/(-um-)</i>	<i>M/(-um-)</i>
UNDERGOER VOICE (UV)	<i>-in-</i>	<i>no-</i>
LOCATIVE VOICE (LV)	<i>-in- -ang</i>	<i>no- -i</i>

<sup>12</sup> Some languages in Indonesia may show +/-REALIS distinctions. They are particularly the languages in North and central Sulawesi. However, Nias, a language in the Nias island, Sumatra, west Indonesia, is also reported to show this mood distinction (Brown 2001).

- (6) Lauje  
*inyaa nrape'i* *a'e*  
 inyaa no-rape'-i *a'e*  
 don't IRR(UV)-close.by-LOC 1s  
 'don't get closer to me' (Himmelman 2002: 128)  
 (gloss slightly modified)

- (7) Lauje  
 a. *setela pinogutuá'* *balung E e'e*  
 setela in-po-gutu-a'e *balung E o'e*  
 after REAL(UV)-GER-make-APPL provisions E DIST  
 'when those provisions had been made (for him)'  
 b. *tuai'e mongkonía'e lia'e*  
 tuai-'u moN-'oni-a'e *lia'e*  
 younger.sibling-1s.GEN AV-carry-APPL 1s  
 'My brother is going to carry (it) for me' (Himmelman 2002: 135, gloss slightly modified)

The Dayak Kendayan language spoken in Pontianak and Sambas districts, West Kalimantan Province, Indonesia (Thomas et al. 1984) is an Indonesian-type language as clearly observed in (8). It has AV, UV and PASS alternations with applicatives *-atn* and *-ik*, which are equivalent to Indonesian applicatives *-kan* and *-i*.

- (8) Dayak Kendayan  
 a. *Tina naap-atn ayukng-nya aik*  
 name AV.take-APPL frien-3GEN water  
 'Tina took water for her friend'  
 b. *Burukng di-badel*  
 bird UV.shoot  
 'The/a bird was shot'  
 c. *Buku-ku di=nyu naap*  
 book-1s.GEN UV=2s.GEN AV.take  
 'My book, you took (them)'

The second group, which is of interest, is the group that has 'mixed' voice systems with pronominal agreement. These languages, mainly in the south east of Sulawesi. e.g. Muna (Van den Berg 1989), Wolio (Alberth 2000) and Tukang Besi (Donohue 1995, 2002), have pronominal agreement on the main verb and Indonesian/Tagalog-type voice morphology on any embedded verbs. A pronominal prefix is generally associated with the A argument (of the transitive verb), which can be cross-referenced by a free NP. This free NP can be specifically marked by a case marker, e.g. by *na* 'NOM' in Tukang Besi. Sentences (9) show independent clauses in Tukang Besi and sentences in (10) show embedded/relative clauses (Donohue 2002).

- (9) Tukang Besi (independent clauses)  
 a. *No-kiki'i te iko'ona beka (AV)*  
 3REAL-bite CR you NOM cat  
 'The cat bit you'

b. *No-kiki'i=ko* (na iko'o) te beka (UV)  
 3REAL-bite=2s.U NOMyou CR cat  
 'The cat bit you' (Lit. You, the cat bit')

c.\* *No-kiki'i=ko* te iko'o na beka  
 3REAL-bite=2s.U CR you NOM cat  
 'The cat bit you' (gloss and translation modified)

(10) Relative clauses in *Tukang Besi*

a. *Te iso te uwe [k[um]engku]*  
 CR yon CR water cold.AV  
 'That is the cold water'

b. *Te ia iso te wowine [b[um]alu te pandola]*  
 CR s/he yon CR woman buy.AV CR eggplant  
 'That is the woman who bought the eggplant'

c. *Te iso te pandola [i-bal(u) u womine]*  
 CR yon CR eggplant UV-buy GEN woman  
 'That's the eggplant bought by the woman'

In *Tukang Besi* main clauses, the verb bears a pronominal prefix, e.g. *no-* in (9), generally associated with the A argument (of the transitive verb), which can be cross-referenced by a free NP. This free NP can be in NOM case marked by *na* in the AV construction as in (9)a or in non-NOM case marked by *te* in the UV construction as in (9)b. The verb may also bear a pronominal enclitic, e.g. *=ko* as in (9)b, which should be associated with the U argument and is clearly the PIV argument because it can only be doubled by a NOM free NP as in (9)b, otherwise the sentence is not acceptable as in (9)c. In the subordinate relative clauses shown in (10) (represented within brackets), the verbs bear no pronominal prefix agreement but the voice markers are commonly the ones found in the Indonesian/Tagalog-type languages: *-um-* for the AV verb as in (10)a,b and *(n)i-* for the UV verb as in (10)c.

Donohue (2002) argues that the AV-UV voice alternations in *Tukang Besi* do not change the syntactic transitivity of the verb. That is, they are like Balinese/Indonesian systems in that they reflect a symmetrical voice system. However, *Tukang Besi* is only 'partly' like Indonesian/Balinese since its voice marking strategies in the main verb is quite different (i.e. making use of pronominal agreement). We can therefore say that it shows a mixed voice system.

Muna (Van den Berg 1989) also shows a mixed voice system, with the independent verbs showing pronominal agreement as in examples (11) and the embedded verbs showing Indonesian-type voice marking as in examples (12). However, unlike *Tukang Besi*, Muna can have more than one pronominal ending on the verb, e.g. *-anda* and *-e* as shown in (11)c, which can be cross-referenced (indicated by the lines) by free NPs. More research is needed to uncover whether Muna is like *Tukang Besi* in that it has voice alternations in the independent verb. Muna lacks phrasal markers of PIV vs. non-PIV as found in *Tukang Besi*; hence we are not sure whether NP scrambling shown in (11)c indeed signals different grammatical relations. It may be just the case that fronting an argument NP is simply a matter of pragmatics (i.e. emphasis given to the argument). In addition, some main verbs may still show relics of the voice markers, e.g. *-m-* in *amala* (11)a and *-um-* in *okumadiuandae* (11)c.

## (11) Muna

a. *Ihintu o-[m]jala koro-no, idi a-[m]jala ghole-no*  
 you 2sIRR-take bottom-its I 1sIRR-take top-its  
 ‘YOU will take the bottom, I will take the top’ (Van den Berg 1989:82, ex. (8))

b. *Ama-mami ne-gholi bhadhu so insaidi* (Van den Berg 1989:82,  
 father-our(ex) 3sREAL-buy shirt for us(ex) ex. (1))  
 ‘Our father bought a shirt for us (ex)’

c. [*Oe aitu*] *o-k[um]adiu-anda-e anahi-hi-mu*  
 water that 2sIRR-bath-them-it child-PLUR-your  
 ‘With that water you must bath your children’ (Van den Berg 1989: 180, ex. (264))

## (12) Embedded verbs in Muna

a. *Suano anoa [ \_\_ me-ala-no ]*  
 not he A.PART-take  
 ‘It is not he who has taken it’ (Van den Berg 1989: 82, ex. (5);  
 bracketing and gapping added)

b. *Ihintu dua so [ \_\_ ne-sambili-ndo mie bhari]*  
 you too FUT P.PART-discuss-their people many  
 ‘You too will be talked about by the people’ (Van den Berg 1989: 82, ex. (6))

The third group of the AN languages of Nusantara is the group of isolating languages. These languages are mainly in the island of Flores, but they can also be found in East Timor. They lack verbal morphology and pronominal agreement on the verb. Word order is crucial in determining grammatical relations. Verheijen (1977), Verheijen and Grimes (1995), Arka and Kosmas (2002) discuss some aspects of Manggarai, a language in the western Flores; Arka (2000b, 2000c) provides a report on comparative studies of grammatical relations in other Flores languages and languages from the neighbouring islands (e.g. Bima, Sikka, Lio, and Lamaholot). Hajek and Bowden (In press) discuss aspects of Waimoa, a highly isolating language from East Timor.

The isolating languages, unlike the Indonesian type and Tagalog type, have no verbal morphology and therefore use an analytic strategy to encode alternative argument linkings/voices. The notion of voice seems to be applicable at least to Manggarai, a language in the western part of Flores. Kosmas (2000), Arka and Kosmas (2002) argue that Manggarai does have a passive structure but it is analytically encoded. That is, the passive sentence is not marked by verbal morphology, rather than by word order and prepositional marking of the Agent argument. Whether other languages in Flores have analytic voice like Manggarai remains unclear. Sawardi (2000) reports that Lio has a kind of analytic UV structures but Baird (2002) reports that Keo, a neighbouring language of Lio, suggests that there is no conclusive evidence for the idea that the U argument that appears sentence initially is grammatically Subject. We leave this for future research.

Flores languages, being isolating in nature, show no applicative affix. Nevertheless, there is evidence that a non-actor argument can be promoted directly to PIV, without being firstly promoted to Object (Arka 2000, to appear.a).

The fourth group is the group with pronominal agreement without voice systems. These languages are typically found in Eastern Indonesia (East Nusa Tenggara, North and South Maluku Provinces) and East Timor. Among them are Taba (in Maluku) as described in Bowden (2001), Kambara on Sumba island (Klamer 1998) and languages in Timor, e.g. Dawan (Arka 2001; Steinhauer

1993, 1996) and Tetun (Van Klinken 1999). Central Moluccan languages such as Buru (Grimes 1991) are also generally of this type. These languages tend to have highly productive verb serialisation.

The pronominal prefix on the verb in the languages of this fourth type shows a fixed association with a particular role, generally with the A argument, which can be cross-referenced by a free NP (i.e. like Muna and *Tukang Besi*). These languages generally lack a phrasal marker of the type found in *Tukang Besi* by which an NP is selected as PIV. They therefore exhibit no voice systems. They typically use a ‘fronting’ strategy or a gapping strategy and retain the pronominal agreement for constructions that would require voice alternations in the Indonesian-type languages. Sentences (13) below show relativisations of the A and U arguments in *Taba* (Bowden 2001)(with the gap representing the position of the relativised argument).

(13) Relativisation in *Taba*

a. *N=am mon [ \_\_ n=wom-ak lai mo ya]*  
 3s=see man 3=scome-APPL just recent REC  
 ‘He saw the man who just came with it’ (Bowden 2001: 393; bracketing added)

b. *L=tala ai [mamatuo=si l=taglik<sup>13</sup> ada \_\_ ]*  
 3p-find stick old.people=p 3p=walk.APPL with  
 ‘He found the stick that the old people walk with’ (Bowden 2001:395, bracketing added)

This group of languages may have applicative morphology. Since the nature of argument association with certain role is fixed, applicativisation in this type of languages may show unusual properties. In *Taba*, for example, it is not always the case that applicativisation increases the syntactic transitivity of the base verb. This is illustrated by instrumental the applicative verbs in (14). Sentence (14)a shows a non-applicative verb *npun* with the instrument argument marked by *ada* (presumably non-CORE). Sentences (14)b-c show the corresponding applicative structures with the applicative verb *npunak*. In (14)b, the instrument argument *peda* ‘machete’ appears as an NP—which is expected—but in (14)c, it can also appear as a PP—which is unexpected.<sup>14</sup> It should be clear that, at least from the marking, the instrument argument in the applicative verb (14)c and in the non-applicative verb (14)a is treated the same. This indicates that applicativisation in *Taba* appears to be more semantically motivated, where a particular role is now part of the semantics of the verb without necessarily being a Core argument. (Indonesian/Balinese applicativisation is generally motivated by pragmatic/syntactic requirement where a non-Actor argument has to be Core/PIV, although it can be also semantically motivated.)

(14) The intrumental applicative verb in *Taba*

a. *Ahmad npun kolay ada peda*  
 name n=pun snake with machete  
 3s-kill

‘Ahmad killed the snake with a machete’

b. *Ahmad npunak kolay peda*  
 name n=pun=ak snake machete  
 3s-kill-APPL

‘Ahmad killed the snake with a machete’

<sup>13</sup> This form *-taglik* comes from *tagil* and the applicative affix *-VK*.

<sup>14</sup> A similar case is encountered in *Bima* (Arka 2000).

- c. *Ahmad*    *npunak*    *kolay*    *ada*    *peda*  
 name        n=pun=ak    with    with    machete  
                  3s-kill-APPL  
 ‘Ahmad killed the snake with a machete’

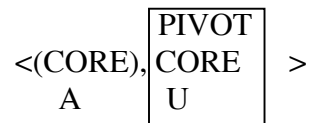
**4 Morphosyntactic vs. morphopragmatic properties of the U-oriented systems.**

In this subsection, I mainly discuss languages with voice systems variations, ignoring the languages of Eastern Nusantara that have no such alternations. I wish to argue that these are more or less U-oriented morphopragmatically. None seems to be a syntactically U-orientated language (i.e. a truly ergative language). First, I briefly discuss what I mean by a truly ergative language, then discuss some aspects of ‘ergative-like’ properties that splash out throughout the Austronesian languages in the region.

**4.1 Syntactic ergativity vs. accusativity: basic properties and voice systems**

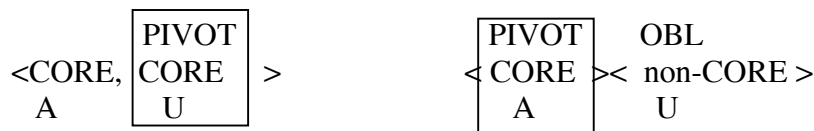
A syntactically ergative language is a language that has a syntactically asymmetric system, skewed towards the U argument, as schematised in (15). (Note that three important aspects of arguments—semantic (macro-)roles, Core status, syntactic PIV—are made explicit.) The box in the representation is intended to capture two related properties: i) it indicates the basic asymmetric alignment, where the U argument is selected as the default PIVOT. When there is only a single Core argument (i.e. intransitive, represented by putting the first Core associated with the A argument within brackets<sup>15</sup>), this sole Core argument is also treated as U (irrespective of its actual semantic role). ii) The A argument is ‘outside’ this basic alignment, which means that when the A argument is to be associated with PIV, it should take over the U position. Given the cross-linguistic constraint that there can be only one argument in this position, this logically leads to the demotion of the U argument—a process known as antipassivisation, schematicised in (16).

(15) Syntactically Ergative system



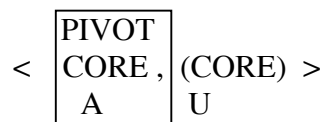
(16) Antipassivisation:

(a) Transitive                       $\longrightarrow$                       (b) Derived antipassive (intransitive)



A syntactically accusative language is a language that has an asymmetrical A-oriented system, as be schematised in (17). It represents the mirror image of the ergative system shown in (15) and has a logical consequence of passivisation as schematicised in (18) when the U argument is linked to PIV.

(17) Syntactically Accusative system



<sup>15</sup> The sole argument of intransitive verb is labeled S in Dixon’s and Comrie’s representations (Comrie 1978, 1989; Dixon 1979, 1994).

## (18) Passivisation:

(a) Transitive  $\longrightarrow$  Perived passive (intransitive)

A voice system typology based on the symmetrical and asymmetrical systems can be shown in (19), where the syntactic status of Core vs. non-Core of A and U arguments is critical for the classification.

## (19) Voice system typology

## a. Symmetrical (neutral orientation):

Either the A or U core argument can be linked to [PIV] without demoting the core status of the other.

## b. Asymmetrical: Only one kind of Core argument can be linked to PIV

## i. Accusative (A-orientation):

The Core A argument position is the default position to be linked to PIVOT. (Implication: The A argument is demoted to non-Core when this position is taken over by the U argument.)

## ii. Ergative (U-orientation):

The Core U argument position is the default position to be linked to PIVOT. (Implication: The U argument is demoted to non-Core when this position is taken over by the A argument)

Given the typology in (19), it turns out that Indonesian languages are syntactically ‘symmetrical’ languages because there is no evidence that we truly have antipassivisation.<sup>16</sup> Davies (1991) argues against an ergative analysis of eastern Javanese; Arka (1998), Artawa (1994) and Artawa and Blake (1997) provide an in-depth study of Balinese symmetrical system and arguments against an antipassivisation analysis in this type of languages.

#### 4.2 Evidence for morphopragmatic U-orientation

While there is evidence that AN languages of Nusantara are not syntactically ergative, I want to show that they do show certain degrees of U-orientation morphopragmatically, which may be also taken as ‘ergative’ properties.

Morphology alone may indicate an ergative pattern. This is known as morphological ergativity; that is, a pattern where the morphology shows a distinct morphological form of the Actor (A) argument in contrast to the Undergoer (U) of the transitive and the sole argument of the intransitive verb (S) (i.e.  $A \neq U = S$ ). A language that shows morphological ergativity does not always mean that it is also syntactically an ergative language. Balinese, for example, as far as the morphology of the pronominal forms are concerned, shows (split) ergativity as demonstrated in Arka (to appear.b), despite clear evidence that it is syntactically a symmetrical language, not a syntactically ergative language (Arka 1998). The split-ergative pattern is demonstrated by Table 3, where the third person pronoun is  $=(n)a$ , a form that is specifically used for the A argument of the UV transitive verb (shown by the shaded cell in Table 3), in contrast with the forms of the U and S arguments. Note that Balinese is only

<sup>16</sup> The question now is whether there is any AN language (possibly beyond Indonesia) that is truly ergative where the AV verb is syntactically intransitive. A good candidate seems to be Puyuma (Teng 2001) but more research is certainly needed to answer the question.

morphologically (split) ergative in a very restricted sense since it applies only in the third person, only in low register, and only with respect to argument marking (i.e. not the verb marking<sup>17</sup>).

**Table 3 Balinese pronominal forms**

	AV transitive verbs		intrans. verbs
	A	U	S
First person	<i>(ti)tiang</i> (h.r.) <i>cang</i>	<i>(ti)tiang</i> (h.r.) <i>cang</i>	<i>(ti)tiang</i> (h.r.) <i>cang</i>
Second person	<i>cai</i> (M) <i>nyai</i> (F)	<i>cai</i> (M) <i>nyai</i> (F)	<i>cai</i> (M), <i>nyai</i> (F)
Third person	<i>ia</i> <i>ida</i> (h.r.) <i>ipun</i> (h.r.) <i>dane</i> (h.r.)	<i>ia</i> <i>ida</i> (h.r.) <i>ipun</i> (h.r.) <i>dane</i> (h.r.)	<i>ia</i> <i>ida</i> (h.r.) <i>ipun</i> (h.r.) <i>dane</i> (h.r.)
	UV transitive verbs		
First person	<i>(ti)tiang</i> (h.r.) <i>cang</i>	<i>(ti)tiang</i> (h.r.) <i>cang</i>	<i>(ti)tiang</i> (h.r.) <i>cang</i>
Second person	<i>cai</i> (M) <i>nyai</i> (F)	<i>cai</i> (M) <i>nyai</i> (F)	<i>cai</i> (M) <i>nyai</i> (F)
Third person	<i>=(n)a</i> <i>ida</i> (h.r.) <i>ipun</i> (h.r.) <i>dane</i> (h.r.)	<i>ia</i> <i>ida</i> (h.r.) <i>ipun</i> (h.r.) <i>dane</i> (h.r.)	<i>ia</i> <i>ida</i> (h.r.) <i>ipun</i> (h.r.) <i>dane</i> (h.r.)

Other morphological evidence that is frequently used to support ergativity in Indonesian-type languages is the fact that the UV verb is generally ‘unmarked’ (i.e. has no clear voice prefix) whereas the AV counterpart is marked by a prefix. That is, the UV verb is morphologically shorter than and therefore more basic than the corresponding AV verb. In this view, Balinese and Indonesian look like ergative languages because the UV form can be thought of as being the default/unmarked/basic choice of voice.<sup>18</sup> Nevertheless, the claim of syntactic ergativity based on morphology alone seems to be controversial (and perhaps untenable). One clear reason is that, as already discussed before, the AV verb in an Indonesian-type language is not an antipassive verb. Another reason is that one could argue that the UV verb has a zero voice prefix, hence the UV verb is also technically a ‘marked’ form.

Evidence from discourse properties and statistics supports the idea that Tagalog-type and Indonesian-type languages are more or less U-oriented. For some authors e.g. Cooreman, Fox and Givón (1984), discourse organizations oriented toward the U argument are taken as evidence for ‘discourse ergativity’. In this paper, to avoid confusion, this term should be understood as evidence for a morphopragmatic U-orientation, which again does not necessarily imply syntactic ergativity.

One aspect of discourse properties is Hopper and Thompson’s idea (Hopper and Thompson 1980) of global/discourse transitivity, where degrees of transitivity is calculated on the basis of

<sup>17</sup> If the overall marking of verbs are taken into account, Balinese and many other AN languages of Nusantara are split-S languages (Arka to appear, 2000) because the intransitive verbs bear certain markings that can be classified as Sa and Su (i.e. the ones that resemble AV verbs and the ones that resemble UV verbs). The split-S properties are observed both in the Indonesian-type languages such as Indonesian (see Vamarasi (1999)) and Balinese (Arka to appear) and the languages with pronominal agreement such as Acehnese (Durie 1985, 1987) and Taba (Bowden 2001).

<sup>18</sup> Evidence from language acquisition seems to suggest that the UV form is unmarked. An unmarked form is generally acquired earlier than the marked form. A case study in the acquisition of Indonesian (Soenjono D, p.c) shows that the UV verb is acquired earlier than the AV verb. This therefore supports the idea that Indonesian shows U-orientation, where the UV verb is more basic than the AV verb.

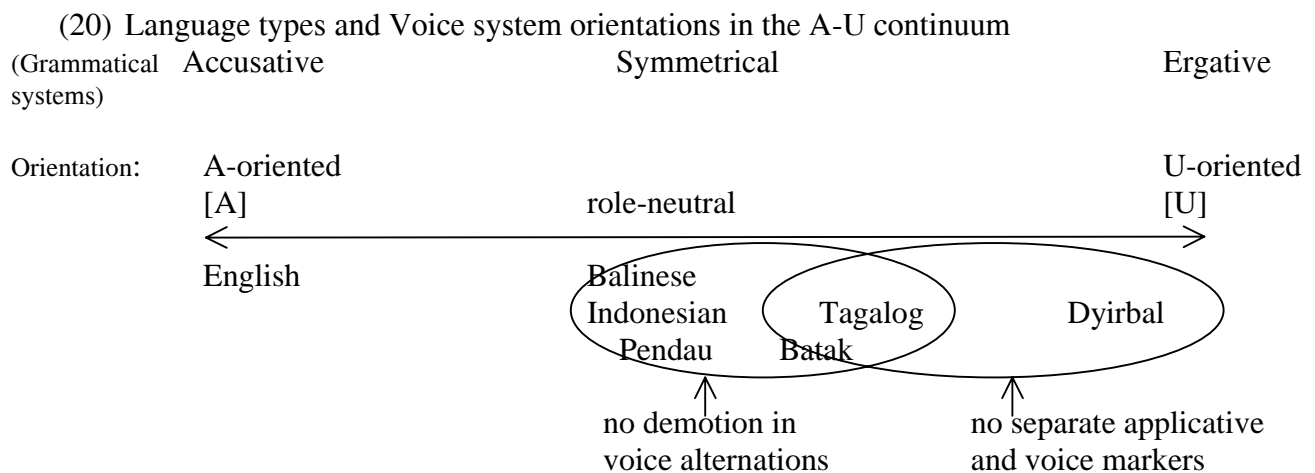
combinatorial properties of semantic and discourse properties. There has been growing research on this notion of discourse transitivity. The findings suggest that UV verbs are ‘more transitive’ than AV verbs. This means that (i) the UV verb is indeed in a sense the real transitive verb; hence the ‘basic’ form, and (ii) analysing the AV verb as the basic form and the UV verb as the ‘derived’ form is untenable.

Another related discourse property is frequency of use in texts. Evidence from text statistics also shows that UV verbs are more frequently used than AV verbs, suggesting that the UV verbs are unmarked/basic. For example, Cooreman, Fox and Givón (1984) report that 166 out of 281 transitive clauses in Tagalog contain non-AV verbs (i.e. 59%) in contrast to 24% AV verbs. Norwood (2002) reports 193 out of 272 verbs in Karo Batak are in UV forms (71%) and only 63 are in AV forms (23%). And, Donohue (2002) reports that the frequency of UV verbs in *Tukang Besi* is around 70%.

However, the evidence from other AN languages of Nusantara does not seem to support a strong U-orientation. In other words, no clear evidence that the UV verb is more basic than the AV verb. For example, Balinese as reported in Pastika (1999) shows that AV and UV verbs have almost equal distribution in spoken narrative texts. In written narrative texts, AV verbs even outnumber UV verbs (70% AV to 30% UV). Quick (2002) shows that in *Pendau* the UV verbs (marked by *ni-*) and the AV verbs (marked by *nong-*) are very much close in their distributions (out of 108, 66 are UV verbs and 42 are AV verbs). Indeed, a closer inspection of the referential distance and topic persistence of the A and U arguments of the AV and UV verbs reveal similarities between these two verbs (Quick 2002:120).

The variations in the statistics shown in Tagalog, Batak, Balinese, and *Pendau* can be taken to support the idea that U-orientation is a matter of degree. In other words, there are some Indonesian-type languages that are more role-neutral rather than U-oriented.

One way to capture the typology of voice systems with their related syntactic and discourse properties is to adopt the view that A vs. U orientations form a continuum as schematicised in (20).



Different languages may have different orientations, which are more or less oriented toward the two ends. Crucially, the orientation is reflected in different linguistics aspects/layers (morphology, syntax and discourse). The orientations along these different layers may not always go together. Thus, at some layer, both Tagalog and Dyirbal are highly U-oriented, which makes them similar in some property (e.g. in the absence of special applicativisation and voice selection markers; to be discussed below). However, at some other syntactic level, Dyirbal can be thought of as being more U-oriented than Tagalog because its U-orientation is such that it is ‘asymmetrical’ in syntax. Note that at this syntactic level, Tagalog is more like Indonesian in that it is ‘symmetrical’ (because it does not show clear evidence for antipassivisation). The idea that Tagalog is like Dyirbal on one hand and is like

Indonesian/Balinese on the other can be captured in (20) by showing its position occupying the intersection of the two circles representing the two groups (Indonesian type and Dyirbal type) in the continuum.

### 4.3 Consequences of U-orientation

In this section, I want to outline two benefits of the analysis using the A-U orientations depicted in (20). The first one, already known in the literature, is that it allows us to account for the typology of voice systems, in particular the explanation of the mirror consequences of passives vs. antipassives as shown in (15)-(18). The point is that a syntactically ergative language is the one with the system where the U-orientation has been grammatically skewed in an asymmetric fashion towards the U position. Consequently, alternative expressions of arguments are syntactically constrained by the alignment of the PIV with the U position. This explains why, for example, there is an obligatory demotion of the U argument (i.e. an antipassive operation) when the A argument takes over the U position as PIV.

The other benefit is that it allows us to account for the phenomenon of the absence of separate morphology for applicativisation and UV voice selection, which arguably correlates with the U-orientation. The intriguing fact is that Dyirbal is like Tagalog in that it also shows the phenomenon. Dyirbal examples from Dixon (1972) are given in (21). A schematic representation of the derivation is shown in (22). Sentence (21)a and its representation in (22)a show a basic verb *balgan* ‘hit’ with the U argument ‘that woman’ appearing as PIV (in NOM case, unmarked). Sentence (21)b and the corresponding representation in (22)b show the derived *balgalman* (with an additional Instrument affix *-mal* realised as *-alm-*), where the Instrument argument is promoted to Core/PIV marked in NOM. Notice the following points: (i) there is no other marking on the derived verb in addition to the Instrumental affix, (ii) the old U (‘the woman’) is demoted to an argument marked by DAT (presumably non-core), and (iii) the A argument remains in ERG case. It should be clear that the instrument affix is just like the instrumental voice marker in Tagalog, which marks a simultaneous promotion of an instrument argument to PIV. Crucially, the affixation (both in Dyirbal and Tagalog) affects the default linking/marking of the U argument, not that of the A argument.

(21) Promotion of the Instrument argument in Dyirbal

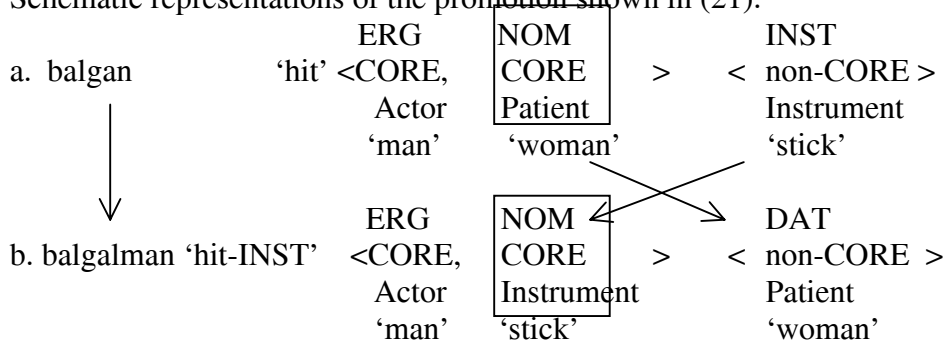
a. <i>balan</i>	<i>djugumil</i>	<i>baygul</i>	<i>yaraygu</i>	<i>baygu</i>
there.NOM.II	woman.NOM	there.ERG.I	man.ERG	there.INST.IV

<i>yuguygu</i>	<b><i>balgan</i></b>
stick.INST	hit.PRES/PAST
‘Man is hitting woman with stick (=that woman that was killed ...)’	

b. <i>bala</i>	<i>yugu</i>	<i>baygul</i>	<i>yaraygu</i>	<b><i>balgalman</i></b>
there.NOM.I	stick.NOM	there.ERG.I	man.ERG	hit.INST.PRES/PAST

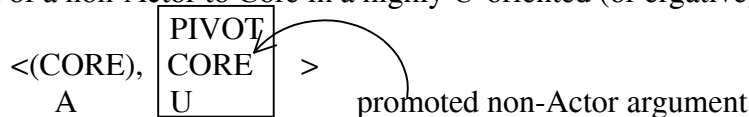
<i>bagun</i>	<i>djugumbilgu</i>
there.DAT.II	woman.DAT
‘Man is hitting woman with stick (=That stick that killed that woman...)’	

(22) Schematic representations of the promotion shown in (21).



In the analysis presented in this paper, the similarity between Tagalog and Dyirbal with respect to the double functions of an affix as applicative and voice marker is not accidental or a coincidence. Indeed, it is expected because it is a logical consequence of a highly U-oriented system. It can be explained in terms of a schematic representation shown in (23). (The bent arrow indicates a promotion of a non-Actor role to CORE.) Recall that in a highly U-oriented system (typical in Ergative languages), the (CORE) U position is the privileged, default, and basic position linked to PIV (indicated by a box). Since the system selects the U position as the position for PIVOT, then any promotion of an argument to this position will be automatically associated with PIV. This accounts for the fact why there is no need for two separate markers (for applicativisation and voice selection). The promotion also affects only the U-PIV argument linking and marking, not the A argument linking/marking. This explains why the A argument remains in ERG case in both sentences in (21). We can conclude that Dyirbal and Tagalog share a property depicted by (23).

(23) Promotion of a non-Actor to Core in a highly U-oriented (or ergative) system

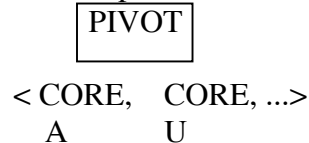


Nevertheless, Dyirbal and Tagalog do not exactly have the same voice system. Unlike Dyirbal, which has clear evidence for syntactic ergativity, such evidence in Tagalog is unclear, inconclusive, and controversial. Kroeger (1993) and Foley (1998) argue that Tagalog is syntactically 'symmetrical' (i.e. like Indonesian and Balinese) because voice alternations do not result in the demotion of the A/U argument.

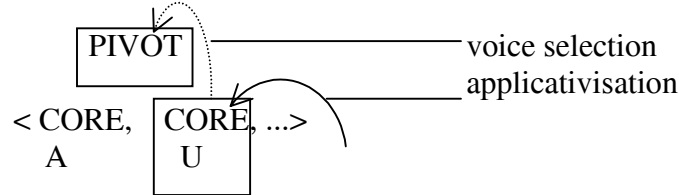
To account for the fact that Tagalog is on one hand like Dyirbal but on the other hand it is not, we should conclude that the property shown in (23) is tightly associated with a highly U-oriented system, typically but not necessarily associated with a syntactically ergative system. That is, both Dyirbal and Tagalog are strongly U-orientated but only Dyirbal is truly syntactically ergative. In short, a U-oriented language is not necessarily an ergative language.

On the contrary, Indonesian and Balinese, which are syntactically symmetrical and morphopragmatically neutral with respect to A vs. U orientation, the selection of PIVOT is not tied with the U position (nor with the A position either). It can be schematicised as (24). Thus any promotion to Core argument in this type of language (indicated by a solid arrow in (25)) does not result in a simultaneous promotion to PIV. It may simply result in a promotion to Core status, unspecified yet for the promotion or linking to PIV. Therefore, it is necessary to have another marker to signal the linking to PIV (i.e. a voice selection marker, indicated by a dotted arrow (25)). It is a two-stage process, which require separate affixes (applicative vs. voice affixes).

(24) The schematic representation of PIV selection in a role-neutral symmetrical system.



(25) Applicativisation and voice selection as separate processes



## 5 Conclusion

This paper has discussed aspects of the voice systems and their markings in the AN languages of Nusantara. Four language types have been recognised: i) languages with typical AN voice systems, ii) languages with mixed voice systems, iii) isolating languages, and iv) languages with pronominal agreement. The paper has mainly discussed the first type of languages, which consist of two sub-types, referred to as Indoensian type and Tagalog type for convenience. The paper has attempted to clarify the notions of syntactic ergativity, markedness, and the related morphopragmatic aspects. It has been argued that certain properties such as alternative expressions of arguments, promotion/demotion effects, absence/presence of separate applicative marking, and morphopragmatic aspects of different voices are associated with argument linkings within different systems that shows degrees of U-orientation across the AN languages of Nusantara.

Areas that need further research include: i) further explorations of the U-orientation in other languages (possibly with comparative studies that include AN and non-AN languages), ii) further examination of the effects of different orientations in different linguistic domains, iii) exact analysis of linking and marking principles (e.g. how to deal precisely with cases like Dayak Kendayan as demonstrated in (8) where the AV prefix can be used in AV and UV verbs), and v) historical significance of the typology shown here (e.g. the intermediate systems shown by Lauje).

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